

REMARKS

Claims 1-23 are pending and stand rejected. Reconsideration is respectfully requested.

1. Rejection of Claims 1-2 Under § 103(a)

Claims 1-2 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,621,662 (“Humphries”) in view of U.S. Patent 5,946,209 (“Eckel”). The Applicant respectfully traverses this rejection.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); MPEP 2143.03. It is respectfully submitted that the Examiner has failed to establish prima facie obviousness of the rejected claims because claims limitations recited therein are not taught or suggested by the combination of Humphries and Eckel. Specifically, the Examiner cites specific text from the Humphries and Eckel references as allegedly teaching certain claim limitations. However, as explained below, the Applicant submits that the cited portions of these references fail to teach the limitations at issue in the rejected claims.

Claim 1 recites a room occupancy sensor that comprises “a sensor for detecting motion in a room, the sensor having *a sensitivity* to the motion for triggering the room occupancy sensor; and a device for measuring ambient room temperature, *wherein the sensitivity is adjusted in response to the measured ambient room temperature.*” On page 2 of the Office Action, the Examiner states that col. 14, line 63 to col. 15, line 16 of Humphries teaches a device for measuring ambient room temperature, “where the sensitivity is adjusted in response to the measured ambient room temperature.” Applicant respectfully traverses this conclusion. This cited text merely describes an HVAC zone controller having a temperature sensor 75 and a thermostat 73 to control the HVAC unit. This text is silent on the sensitivity of any of these components, let alone adjusting the sensitivity *in response to the measured ambient room temperature*. In fact, a word search of this patent for the term “sensit” (to capture all root forms for the word sensitivity) turned up only one hit (Col. 21, lines 5-6), which discusses the sensitivity of a microphone in response to holding down a talk button. Thus, while Eckel does

teach motion sensors, there is no suggestion or motivation provided by Humphries to modify them to adjust their sensitivities in response to measured ambient room temperatures.

The Applicant further wishes to point out that there must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co., 730 F.2d 1452, 1462, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984). Not only does the combination of Humphries and Eckel fail to teach all the limitations of claim 1, but also there is no suggestion to combine the teachings of these references. The Examiner's stated motivation for combining Eckel with Humphries is "because it would provide having the sensitivity to the motion triggered the occupancy sensors." It is unclear what this statement means, how "sensitivity" can be "triggered", and how this suggests combining the teachings of these two references. In any event, Applicant respectfully submits that there is no suggestion or motivation for combining the teachings of Humphries with that of Eckel.

Claim 2 is dependent upon claim 1, and is therefore considered allowable for the reasons set forth above. Further, claim 2 recites the *sensitivity* of the motion sensor is increased as the ambient room temperature increases. On page 3 of the Office Action, the Examiner states that col. 15, lines 10-16 of Humphries shows a room occupancy sensor "wherein the sensitivity is increased as the ambient room temperature increases". This statement is traversed for several reasons. First, the text cited from Humphries merely describes how the HVAC controller compares the set thermostat temperature with that measured by the temperature sensor for operating the HVAC system. The actual sensitivity, let alone a change of any sensitivity in response to measured temperature, of any device is not discussed. Second, this statement contradicts the Examiner's earlier statement on page 2 of the Office Action, that Humphries "does not specifically show a room occupancy sensor....comprising: a sensor for detecting motion in a room, the sensor having a sensitivity to the motion for triggering the room occupancy sensor."

Therefore, since the combination of references fails to result in the claimed combination, and there is no suggestion to combine the teachings of these references, it is respectfully

submitted that claims 1 and 2 are not rendered obvious by Humphries and Eckel, and that this rejection should be withdrawn.

## **2. Rejection of Claims 3-4 Under § 103(a)**

Claims 3-4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.

Similar to claim 1, claim 3 recites a home automation system having at least one room motion sensor that includes “a sensor for detecting motion in one of the rooms, the sensor having *a sensitivity* to the motion for triggering the room occupancy sensor, and a device for measuring ambient room temperature, *wherein the sensitivity is adjusted in response to the measured ambient room temperature.*” Therefore, for the reasons set forth above in Part 1 with respect to claim 1, the Applicant respectfully traverses the rejection of claim 3, as Humphries and Eckel fail to teach the elements of this claim, and there is no suggestion or motivation to combine the teachings of these references.

Similar to claim 2, claim 4 recites that “*the sensitivity is increased as the ambient room temperature increases.*” Thus, for the reasons set forth above in Part 1 with respect to claim 2, the Applicant respectfully traverses the rejection of claim 4, as Humphries and Eckel fail to teach the elements of this claim.

## **3. Rejection of Claim 5 Under § 103(a)**

Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.

Claim 5 recites “a sensor for detecting motion in a room, the sensor having *a sensitivity to the motion for triggering the room occupancy sensor, wherein the sensitivity is adjusted in response to detected motion by the sensor.*” Applicant submits such a sensor and the recited adjustment of its sensitivity is not taught or suggested by Humphries and Eckel.

On page 4 of the Office Action, the Examiner concludes that Eckel shows a sensor having a sensitivity that “is adjusted in response to detected motion by the sensor (col. 23 lines 26-47).” The Applicant respectfully traverses this conclusion. Rather, it is the sensitivity of the

microprocessor 70 (via programming) that is changed *based on the time of day* (“daytime versus nighttime”, see lines 32-39), not the sensitivity of a motion detector *in response to detected motion by the sensor* as recited in claim 5.

The Applicant also traverses the Examiner’s stated motivation for combining these references (found on page 4 of the Office Action): “it would provide for adjusting the sensitivity in response to the motion detected by the sensor signals.” This stated reasoning is just a mere recitation of the claim language. Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. Para-Ordnance Mfg., Inc. v. SGS Importers Int’l., Inc., 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), cert. denied, 117 S.Ct. 80 (1996).

For these reasons, it is respectfully submitted that this rejection should be withdrawn.

#### 4. Rejection of Claims 6-10 Under § 103(a)

Claims 6-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.

Claim 6 recites a home automation system having controlled objects, room motion sensors, and “a controller for controlling the controlled objects in response to detected occupancy by the plurality of room motion sensors; wherein at least one of the room motion sensors includes a sensor for detecting motion in one of the rooms, the sensor having *a sensitivity* to the motion for triggering the room occupancy sensor, *and wherein the sensitivity is adjustable in response to signals from the controller.*” It is respectfully submitted that Humphries and Eckel fail to teach or suggest the claimed sensor (having a sensitivity adjustable in response to signals from the controller).

The Examiner states on page 5 of the Office Action that Eckel shows a home automation system “having a sensor with a sensitivity to the motion for triggering the room occupancy sensor, and wherein the sensitivity is adjustable in response to signals from the controller (col. 23 lines 26-47).” The Applicant respectfully disagrees. This text from Eckel teaches that the microprocessor 70 is programmed to be more sensitive at certain times of the day, not that *the*

*sensitivity* of the sensor for detecting motion is adjusted *in response to signals* from a system controller as recited in claim 6.

The Applicant also traverses the Examiner's stated motivation for combining these references, as it is merely a recitation of the claim language. See Para-Ordnance Mfg. case in Part 3 above.

Applicant therefore submits that claim 6, and claims 7-10 dependent thereon, are not rendered obvious by Humphries and Eckel.

Further, these references fail to teach the limitations recited in these dependent claims as well. For example, similar to claim 5, claim 7 recites that the sensor sensitivity is adjusted in response to detected motion by the sensor. Thus, for the reasons set forth above in Part 3 with respect to claim 5, the Applicant respectfully traverses the rejection of claim 7, as Humphries and Eckel fail to teach the elements of this claim.

Claims 8-9 recite the concept of adjusting the sensitivity of a sensor for detecting motion *in response to other sensors* (movement through doorway detected by entry/exit sensor as recited in claim 8, or occupancy of specific location in a room detected by spot sensor as recited in claim 9). Humphries and Eckel simply do not teach or suggest such a concept, especially in col. 23 lines 26-47 of Eckel as alleged by the Examiner. The Applicant also respectfully traverses the Examiner's reasoning for combining these references for the same reasons as set forth in Part 3 above (namely, the cited motivation is merely a recitation of the claim language).

The Applicant therefore respectfully submits that the rejection of claims 6-10 is improper and should be withdrawn.

#### **5. Rejection of Claim 11 Under § 103(a)**

Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.

Claim 11 recites an occupancy sensor that includes "a sensor for detecting motion in a room, and a filter mechanism for triggering the room occupancy sensor *only in response to repeated motion detections by the sensor that exceed a predetermined number, that are each separated apart by a predetermined separation time period, and that all occur within a*

*predetermined group time period.*” In contrast, Eckel teaches programming microprocessor 70 to operate in a tolerant zone, which requires the motion sensor output signal to be characterized by a greater magnitude, duration, frequency, duty cycle or slew rate (see col. 23 lines 26-64). These parameters from Eckel are distinguishable from, and inferior to, the parameters used by the claimed filter mechanism, which uses the combination of **number** (of detections), **separation time period** (between detections), and **group time period** (within which detections must occur) to trigger the motion sensor (as explained on page 10, lines 12-32 of the specification). It has been found that this combination of parameters significantly reduces the instances of false positives, Humphries and Eckel simply do not contemplate utilizing the claimed combination of parameters to trigger a motion sensor.

The Examiner states on pages 7-8 that col. 24 lines 16-37 teach the claimed filter mechanism. Applicant respectfully traverses this conclusion. This text merely describes three parameters used to process the motion sensor signal: slew rate (change in signal voltage over time), count (number of times slew rate is reached), and time of day. The concepts of *separation time period* and *group time period* are simply not taught or suggested by slew rate, count or time of day.

The Applicant also respectfully traverses the Examiner’s reasoning for combining these references for the same reasons as set forth in Part 3 above (namely, the cited motivation is merely a recitation of the claim language).

For these reasons, this rejection should be withdrawn.

#### **6. Rejection of Claims 12-17 Under § 103(a)**

Claims 12-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.

Similar to claim 11, claim 12 recites a home automation system using a filter mechanism for triggering the room motion sensor “*only in response to repeated motion detections that exceed a predetermined **number**, that are each separated apart by a predetermined **separation time period**, and that all occur within a predetermined **group time period**.*” Thus, for the

reasons set forth above in Part 5 with respect to claim 11, it is respectfully submitted that claim 12 is not rendered obvious by Humphries and Eckel.

Claims 13-17 depend upon allowable claim 12, and are therefore considered allowable as well. Further, the combination of Humphries and Eckel fails to teach or suggest the elements of these dependent claims. For example, claim 14 recites that the controller for the controlled objects “*counts the **number** of the repeated motion detections, determines the **time separation** between the repeated motion detections, and determines the **time period** in which all the repeated motion detections occur; and the controller determines that the room motion sensor is triggered when the counted motion detections exceed the predetermined **number**, are separated apart by the predetermined **separation time period**, and all occur within the predetermined **group time period**.*” As made clear above in Part 5, the portions of Eckel relied upon by the Examiner simply do not contemplate using the combination of **detection number**, **time separation** and **group time period** as recited in claim 14.

Claims 15-16 recite adjusting at least one these parameters (number, time separation, group time period) in response to detected movement by an entry/exit sensor (claim 15) or a spot sensor (claim 16). The Applicant traverses the rejection of these claims for the reasons set forth above in Part 4 with respect to claims 8-9 (Humphries and Eckel do not teach or suggest changing the sensitivity of one sensor based upon detected movement/presence by another sensor), and in Part 5 above with respect to claim 11 (Humphries and Eckel do not teach or suggest a filter mechanism for a motion sensor utilizing a predetermined **number**, predetermined **time period** and predetermine **group time period** for triggering that motion sensor). Further, neither reference suggest modifying the **number**, **time period** and **group time period** in response to detected movement by an entry/exit sensor or a spot sensor as recited in claims 15-16.

It is therefore respectfully submitted that the rejection of claims 12-17 should be withdrawn.

#### 7. Rejection of Claim 18 Under § 103(a)

Claim 18 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.

Similar to claim 1, claim 18 recites a method of automated control that includes controlling the controlled objects in response to detected occupancy by the plurality of room motion sensors, measuring ambient room temperature, and “*adjusting a sensor trigger sensitivity of at least one of the room motion sensors in response to the measured ambient room temperature.*” Thus, for the reasons set forth above in Part 1 with respect to claim 1, it is respectfully submitted that claim 18 is not rendered obvious by Humphries and Eckel, and that the rejection of this claim should be withdrawn.

#### **8. Rejection of Claims 19-22 Under § 103(a)**

Claims 19-22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.

Similar to claim 5, claim 19 recites a method of automated control that includes controlling the controlled objects in response to detected occupancy by the plurality of room motion sensors, and “*adjusting a sensor trigger sensitivity of at least one of the room motion sensors in response to detected occupancy by at least one of the room motions sensors.*” Thus, for the reasons set forth above in Part 3 with respect to claim 5, it is respectfully submitted that claim 18 is not rendered obvious by Humphries and Eckel, and that the rejection of this claim, and claims 20-22 dependent thereon, should be withdrawn.

Similar to claims 8-9, claims 20-21 recite the concept of adjusting the trigger sensitivity of a room motion sensor *in response to other sensors* (movement through doorway detected by entry/exit sensor as recited in claim 20, or occupancy of specific location in a room detected by spot sensor as recited in claim 21). Thus, for the reasons set forth above in Part 4 with respect to claims 8-9, it is respectfully submitted that claims 20-21 are not rendered obvious by Humphries and Eckel, and that the rejection of these claims should be withdrawn.

#### **9. Rejection of Claim 23 Under § 103(a)**

Claim 23 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Applicant respectfully traverses this rejection.



Similar to claim 11, claim 23 recites method of automated control that includes triggering one of the room motion sensors only *"in response to repeated motion detections that exceed a predetermined number, that are each separated apart by a predetermined separation time period, and that all occur within a predetermined group time period"*, and controlling at least one controlled object in response to the triggered room motion sensor. Thus, for the reasons set forth above in Part 5 with respect to claim 11, it is respectfully submitted that claim 23 is not rendered obvious by Humphries and Eckel, and that the rejection of this claim should be withdrawn.

For the foregoing reasons, it is respectfully submitted that the claims are in an allowable form, and action to that end is respectfully requested.

Respectfully submitted,

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Dated: Feb 18, 2003

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